

App. No. 10/822,312

Amendment Dated: August 30, 2006

Reply to Office Action of May 31, 2006

REMARKS/ARGUMENTS

The claims have been amended as set forth above. The specification has been amended to correct a minor typographical error. Applicants believe the claims are in condition for allowance. No new matter has been added.

**I. Rejection of Claims 1-4 and 7-24 Under 35 U.S.C. 102(b)**

Claims 1-4 and 7-24 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,035,330 issued to Astiz et al. (hereinafter "Astiz"). Applicants respectfully disagree with the rejection. The claims have been amended as set forth above to include elements not taught or otherwise suggested by Astiz. Amended independent claim 1 includes the following combination of elements not taught or otherwise suggested by Astiz:

receiving a selected web site;

automatically parsing the selected web site for web links subordinate to the selected web site not requiring user interaction;

mapping the selected web site and parsed web links to a web diagram data structure;

receiving a selection of a first web link from the parsed web links as a starting point for browsing a path through the selected web site;

mapping the first web link to the web diagram data structure;

*receiving a selection of a second web link subordinate to the first web link, the second web link requiring user interaction;*

*mapping the second web link to the web diagram data structure; and*

creating and displaying a web diagram from the web diagram data structure *showing a diagram node for each of the selected web site, the parsed web links subordinate to the selected web site not requiring user interaction, and the selected second web link.*

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Applicants assert that the combination of elements of independent claim 1 are not taught or otherwise suggested by the cited references. As an example of one problem associated with the prior art, the background of the specification recites as follows:

"Methods have been developed for automatically diagramming a selected web site and its associated web pages and links so that a user may review a diagrammatic structure of the web site to assist the user in understanding the structure of the web site and to assist the user in subsequent navigation of the web site. *Unfortunately, such automatic systems are limited to diagramming only those portions of a site that can be accessed without user interaction. For example, an automated web site diagramming system cannot navigate through a page or link requiring user input, such as a password, or user selection, such as selection or entry of a search term.* If a diagram of such areas of a web site is needed by a user, then the automated diagram is of little use to the user. For example, the user may navigate a web site of a book ordering company. The particular search path used by the user for finding books of interest may require input of search terms at many levels of searching. *A mapping and diagramming of the general web site structure without a mapping and diagramming of the search path followed by the user is not very useful to the user. In addition, such systems often diagram a web site according to a wider scope than is needed by the user. Such systems typically follow every web page and link that may be parsed without user interaction and are only limited by the number of links and the depth of path specified by the user.* Unfortunately, the resultant diagram may give the user information that is neither required nor useful." *Specification*, at Page 1, Line 20 - Page 2, Line 9.

The specification addresses at least the problems identified in the background of the present invention by teaching as follows:

"Embodiments of the present invention solve the above and other problems by providing methods and systems for automatically diagramming a web site and associated web pages and links *based on interactive navigation and selection performed by a user.* Through interactive hyperlink selection and diagramming of the present invention, a web site diagram is constructed that is based upon the web pages and links selected by a user *while the user is traversing or navigating the web site starting at any given point within the web site.* The diagram may be prepared so that only user-selected web pages and/or links are mapped and diagrammed, or all web pages and/or links at each traversed level of the web site may be mapped and diagrammed."

Conversely, Astiz teaches as follows:

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*"This example implementation offers significant cost and performance advantages over one in which each user accessing the Web site is mapping the site.* From the user's point of view, the site map already exists. The user therefore does not have to wait for his workstation or PC to generate the map--a lengthy process if the Web site is large and the user's access connection speed is low (residential Internet access connections are generally low speed). Additionally, the user must be connected to the Internet Service provider while the site is being mapped and therefore incurs connection costs. From the point of view of the Web site owner, if each user that accesses his Web site generates a map, the Web site server must transmit larger volumes of data to the user's workstation than the server normally would transmit within a shorter period of time. Effectively, the entire Web site would have to be transmitted. Since the map maker on the user workstation can process the information much faster than a user browsing through the site, there would be a significantly larger number of requests for files placed on the Web host over a shorter span of time. This would significantly degrade the performance of the server and affect the overall quality of the service." *Astiz*, at column 8, lines 33-55.

As indicated in the above block quote, *Astiz* pertains to associating mappings with web sites themselves, and *Astiz* teaches that tracking and diagramming *during navigation of the web sites* as detrimental. *Astiz* teaches mapping before user navigation. Accordingly, Applicants believe that *Astiz* fails to teach "receiving a selection of a second web link subordinate to the first web link, the second web link requiring user interaction." Also, Applicants believe that *Astiz* fails to teach "mapping the second web link to the web diagram data structure." Applicants further believe that *Astiz* fails to teach "creating and displaying a web diagram from the web diagram data structure showing a diagram node for each of the selected web site, the parsed web links subordinate to the selected web site not requiring user interaction, and the selected second web link." As such, applicants believe that independent claim 1 is allowable.

Independent claim 12 includes the following combination of elements not taught or otherwise suggested by the cited references:

displaying a diagram of a structure of a selected web site, the diagram including diagram nodes for the selected web site and for web links associated with the selected web site that may be navigated without user interaction;

receiving a selection of a first web link from the diagram as a starting point for browsing a path through the selected web site;

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mapping the selected first web link to the structure;

*receiving a selection of a second web link subordinate to the first web link, the second web link requiring user data input;*

*mapping the second web link to the structure after input of the user data; and*

*automatically updating the displayed diagram to add a diagram node for the selected second web link whereby the diagram node for the selected second web link is added to the diagram in a position illustrating a relationship of the selected second web link to other nodes in the diagram.*

Applicants rely on the arguments set forth above in support for independent claim 1. Also, with regard to independent claim 12, Applicants can find no teaching in the cited reference of "the second web link requiring user data input." Also, Applicants can find no teaching of "mapping the second web link to the structure after input of the user data." Again, as stated above, Astiz does not teach these elements, in part, because Astiz pertains to associating maps predetermined before user interaction with web sites. Since Astiz does not teach or suggest the features of claim 12, Applicants respectfully request withdrawal of the rejection of claim 12.

Independent claim 18 includes the following elements not taught or otherwise suggested by the cited references:

automatically parsing the selected web site for web links subordinate to the selected web site not requiring user interaction;

mapping the selected web site and parsed web links to a web diagram data structure;

receiving a selection of a first web link from the parsed web links as a starting point for browsing a path through the selected web site;

mapping the first web link to the web diagram data structure;

*receiving a selection of a second web link subordinate to the first web link, the second web link requiring user data input;*

*mapping the second web link to the web diagram data structure after input of the user data; and*

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*creating and displaying a web diagram* from the web diagram data structure showing a diagram node for the selected web site, each of the parsed web links subordinate to the selected web site not requiring user interaction, *and for the selected second web link.*

Applicants rely on the above arguments in support for independent claim 18. Applicants can find no teaching in the cited reference of "receiving a selection of a second web link subordinate to the first web link, the second web link requiring user data input." Also, Applicants can find no teaching of "mapping the second web link to the web diagram data structure after input of the user data." Again, as stated above, Astiz does not teach these elements, in part, because Astiz pertains to associating maps predetermined before user interaction with web sites. Since Astiz does not teach or suggest the features of claim 18, Applicants respectfully request withdrawal of the rejection of claim 12.

Claims 2-4, 7-11, 13-17, and 19-24 include elements not taught or otherwise suggested by the cited reference. Moreover, those claims ultimately depend from independent claims 1, 12, and 18, respectively. As such, Applicants believe that the dependent claims are allowable for at least the same reasons associated with the independent claims.

## **II. Rejection of Claims 5 and 6 Under 35 U.S.C. 103(a)**

Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Astiz. The office action states that Astiz does not expressly teach the boundary parameters as including limiting and automatic parsing to a specified number of levels. The office action also states that Astiz does not expressly teach the boundary parameters as including limiting and automatic parsing to a maximum number of discovery levels. The office action asserts that these elements would be obvious in light of Astiz. As stated above, Applicants assert that fails to teach tracking and diagramming during navigation. Astiz teaches as follows:

"This example implementation offers significant cost and performance advantages over one in which each user accessing the Web site is mapping the

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site. From the user's point of view, the site map already exists. The user therefore does not have to wait for his workstation or PC to generate the map--a lengthy process if the Web site is large and the user's access connection speed is low (residential Internet access connections are generally low speed). Additionally, the user must be connected to the Internet Service provider while the site is being mapped and therefore incurs connection costs. From the point of view of the Web site owner, if each user that accesses his Web site generates a map, the Web site server must transmit larger volumes of data to the user's workstation than the server normally would transmit within a shorter period of time. Effectively, the entire Web site would have to be transmitted. Since the map maker on the user workstation can process the information much faster than a user browsing through the site, there would be a significantly larger number of requests for files placed on the Web host over a shorter span of time. This would significantly degrade the performance of the server and affect the overall quality of the service." *Astiz*, at column 8, lines 33-55.

Thus, *Astiz* teaches that all the levels of a web site should be mapped to avoid non-mapping of any levels and avoid automatically mapping any levels during user navigation of the web site. Accordingly, Applicants believe that the limiting the number of levels (either to a specified number of levels of claim 5 or a maximum number of levels of claim 6) are not rendered obvious in view of *Astiz*. Moreover, claims 5 and 6 ultimately depend from independent claim 1. As such, Applicants believe that dependent claims 5 and 6 should be found allowable for at least the same reasons set forth for independent claim 1.

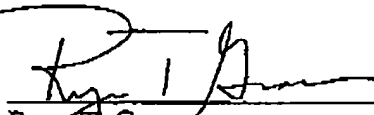
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### III. Request for Reconsideration

In view of the foregoing amendments and remarks, all pending claims are believed to be allowable and the application is in condition for allowance. Therefore, a Notice of Allowance is respectfully requested. Should the Examiner have any further issues regarding this application, the Examiner is requested to contact the undersigned attorney for the applicant at the telephone number provided below.

Respectfully submitted,

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